

11.6% vs 11.2%; M: 9.1% and 8.8% vs 8.4%; NE: 5% and 4.7% vs 4.3%). When others such as the East South Central and the West South central regions were found in a higher proportion among the good, fair and poor health groups (ESC: 5.8%, 6.7% and 9.6% against 5.6% WSC: 13.6%, 13.4% and 15.6% vs 12.5%). The coefficients found in the ordered logit model were all significant and have confirmed the descriptive study. **CONCLUSIONS:** The location influences the way people perceive their health in the US. Next step would be to look at other socio-demographics variables such as people's revenue, race or education.

**PIH55****A COMPARISON OF VALUE FOR HEALTH STATES WORSE THAN DEAD BETWEEN JAPAN AND UK**

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**OBJECTIVES:** To clarify the difference of value for health states worse than dead (WTD) between Japan and UK. **METHODS:** A web survey was conducted asking respondents whether each health states is WTD before discrete choice experiment (DCE) tasks (DCE results not described). Health states were described using the EQ-5D-3L descriptive system. The 48 health states were blocked into 24 sets for DCE tasks. All respondents were asked 12 sets tasks randomly. We compared value for WTD between Japan and UK, UK's value referred the article (Bansback et al., 2011). **RESULTS:** A sample of 1242 members of the market research panel was invited by email to participate in the survey. Of these, 1085 (87%) completed all tasks. The mean age of participants were 49.5 years (SD=16.6). High numbers of value of WTD were confirmed. 50.5% of respondents judged health state 33333 to be value of WTD, but 77.0% judged in UK. Similarly, 45.7% and 41.0% of them judged to be value of WTD for health state 33332 and 33323, respectively (72.0% and 60.0% in UK). **CONCLUSIONS:** Our findings suggest that Japanese value of worse health states not to be low in comparison with UK's. On the other hand, it was thought that participants might not understand the tasks.

**PIH56****PATIENT-REPORTED FALL RELATED HEALTH CARE SERVICES IN ELDERLY WOMEN**

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**OBJECTIVES:** Although the falls in elderly people lead to serious health consequences, the economic burden is underestimated. The aim of this study was to examine the fall-related out-patient medical care in community-dwelling elderly women. **METHODS:** Women aged 65 years and older who visited National Osteoporosis Center for diagnostic or treatment procedures, were interviewed by phone recording the consequences and health care procedures related to every fall sustained during the previous 12 months. **RESULTS:** The study population consisted of 310 women who reported one or more fall, one in three of them had fallen twice or more. Of all women who fell, 280 (90.3%) reported their fall resulted in an injury, and 77 (15.3%) falls led to bone fractures. Fall related medical care was provided to 135 women: to 43.5% of those who fell and 48.2% of those who sustained injuries from falling received medical attention. Among these, the highest percentage reported using of out-patient medical services. The number of out-patient visits reported (535 visits in total) ranged from 1 to 13, and in 70 cases (51.9%) – from 2 to 4 visits. Different types of out-patient health care were used by 43.5% of women who fell. The majority of specialists visited were orthopaedist, surgeon, and radiologist. An ambulance was used by 11.9%, and family doctor was visited by 19.4% of fallers. The mean number of health care procedures was higher in women who sustained a fracture, as compared to those who did not: 4.9 (95% CI 4.4–5.4) and 0.67 (95% CI 0.29–0.76), respectively;  $p < 0.0001$ . **CONCLUSIONS:** From all self-reported falls registered in women over 65 years, 90.3% resulted in any injuries. The mean number of out-patient visits per faller was 1.73 (95% CI 1.36–2.1).

**PIH57****LONG-TERM GRADING OF HEALTH-RELATED QUALITY OF LIFE OF CARE-NEEDED ELDERLY: A 2-YR FOLLOW-UP STUDY**

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**OBJECTIVES:** To assess the long-term grading of health-related quality of life (HRQL) of care-needed elderly who had received the occupational therapy in Japan. **METHODS:** We carried out a 2-year follow-up study of multicenter trial. The subjects were recruited from 26 nursing homes in Japan. The proxy of the subjects completed a questionnaire of the Health Utilities Index Mark3 (HUI3). We tested the long-term effect of occupational therapy and aged natural grading of care-needed elderly. **RESULTS:** 55 male and 85 female subjects remained at final follow-up. The mean age of subjects was 76.9 years. The global score of HUI3 of baseline was 0.377 (SD=0.270). Their score was improved for three month (mean score=0.418, SD=0.284), but had deteriorated to 0.328 (SD=0.324) 2-year later. Speech, Ambulation, Emotion and Cognition had deteriorated significantly among 8 attributes of HUI3. In regression analysis, higher care level significantly increased risk of deteriorating HRQL of care-needed elderly. **CONCLUSIONS:** Our findings suggest that occupational therapy have short-term effect for care-needed elderly. However, we cannot affirm that that occupational therapy has long-term effect. The aging may deteriorate their HRQL of care-needed elderly naturally.

**PIH58****DIFFERENTIAL ITEM FUNCTIONING AND THE EQ-5D: EVIDENCE FROM THE UK HOSPITAL EPISODE STATISTICS**

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**OBJECTIVES:** The EuroQol-5D (EQ-5D) is a generic patient-reported outcome measure (PROM) allowing comparisons to be made across different diseases and conditions. The instrument has been used in the UK's National Health Service (NHS) since 2009 to collect data from patients to assess the effectiveness of a number of surgical interventions. The aim of this study was to investigate whether the EQ-5D domains behave similarly across patient samples. **METHODS:** The data were derived from published Hospital Episode Statistics (HES) for April 2013 to March 2013. The EQ-5D had been completed by patients undergoing four surgical procedures: groin hernia repair (N=21831), hip (N=37800) and knee replacement (N=40429) and varicose vein repair (N=4681). The partial credit model (Masters, 1982) was applied to the data. Uniform differential item functioning (DIF) and non-uniform DIF (criterion difference > 0.5 logits) was assessed across the four interventions, gender, age group and the interactions. **RESULTS:** There was significant uniform DIF between the 4 interventions with 50% of all possible contrasts demonstrating DIF. The only domain not affected by DIF was Discomfort/Pain. There was DIF present in 2/3 of the contrasts for Anxiety/Depression, Mobility and Self-care and in 50% of the Usual Activities domain. DIF was also demonstrated across age groups for the Mobility and Anxiety/Depression domains. No DIF was found for gender. Finally, non-uniform DIF was demonstrated for age group by intervention. The Mobility domain showed the greatest degree of non-uniform DIF (20/24, 83% of the contrasts). **CONCLUSIONS:** The finding that the EQ-5D performs differentially depending on the patient group is an important one and means that the instrument should be used cautiously when comparisons across different surgical interventions are being made. This has potentially major ramifications for the use of the instrument as a measure of efficacy in the NHS.

**PIH59****ANTENATAL DEPRESSION AND ITS RISK FACTORS AMONG WOMEN IN CHENGDU OF CHINA RESULTS FROM A HOSPITAL BASED SURVEY**

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**OBJECTIVES:** Mental health of pregnant women is essential for maternal and neonatal health. However, there is lack of statistics of antenatal depression in China. The study aimed to investigate the prevalence of antenatal depression and explore its risk factors among pregnant women in Chengdu of China. **METHODS:** Women at third trimester of pregnancy were screened for symptoms of depression at antenatal clinics of West China Second Hospital between 28 October 2013 to 28 February 2014 based on the Chinese version of the Edinburgh Postnatal Depression Scale (EPDS) and a psychosocial risk factors checklist. **RESULTS:** A total of 2243 pregnant women aged 30.0±4.0 years participated in the survey. The mean EPDS score was 8.43 (standard deviation: 3.97). With a threshold score of 13, 14.2% were screened as having symptoms of depression. Age ( $P=0.007$ ), education level ( $P<0.001$ ), occupation ( $P=0.001$ ), number of children (including the fetus) ( $P=0.018$ ), number of miscarriage/abortion ( $P=0.048$ ), and age of first pregnancy ( $P=0.001$ ) were associated with antenatal depression in univariable analysis but not multivariable analysis ( $P>0.05$  for all). Women who were dissatisfied with living conditions (OR=1.81; 95% CI: 1.38–2.38), had a poor relationship with mother-in-law relationship (OR=2.20; 95% CI: 1.65–2.92), and had unplanned pregnancy (OR=1.34, 95% CI: 1.02–1.76) were more likely to show antenatal depression symptoms. **CONCLUSIONS:** Our study shows antenatal depression might be prevalent among Chinese women in Chengdu. Early detection and intervention for antenatal depression may be necessitated to improve maternal and neonatal health after more systematic studies and reliable data are available.

**PIH60****DISUTILITY ASSOCIATED WITH ERECTILE DYSFUNCTION IN THE MIDDLE-AGED OR OLDER MALES**

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**OBJECTIVES:** Erectile dysfunction (ED) affects millions of males world-wide. While it is obvious that ED affects individuals Quality of Life, the quantifiable data on disutility associated with ED is still lacking. Moreover, the health utility – impact has not been studied using multiple health utility instruments previously. Our aim was to quantify the disutility caused by different levels of ED using two preference-based health utility indices simultaneously. **METHODS:** A total of 362 middle-aged or older (52–75 year old) males responded to the five-item International Index of Erectile Function (IIEF-5) in the cross-sectional sample of Savitaipale Study in 2007–2008. The lower score in IIEF-5 (range 1–25) corresponds to more severe ED. Health utility was assessed with two separate validated preference-based instruments, 15D and SF-6D. Data were adjusted for age, number of morbidities and marital status. Minimally important differences (0.02–0.03 for 15D and 0.04 for SF-6D) were used to guide the clinical interpretation of the results. **RESULTS:** Both 15D and SF-6D were significantly correlated with IIEF-5 ( $p<0.001$ ). When examining the ED categorically, the adjusted marginal disutility (0.023 in 15D and 0.038 in SF-6D) was statistically significant ( $p<0.05$ ) and clinically noticeable even at the mild ED (IIEF-5 score of 22–25). The marginal disutility progressively increased with increasing level of dysfunction, and was highest among the males who had not had sexual activity in past 6 months (0.060 in 15D and 0.093 in SF-6D,  $p<0.001$  on both). On average, a one point decrease in IIEF-5 corresponded to a 0.003 decrease in 15D ( $p<0.001$ ) and 0.004 in SF-6D ( $p<0.001$ ). **CONCLUSIONS:** Erectile dysfunction can cause a substantial disutility on males. While this condition may not be life threatening or is not considered a major public health problem societally, the marginal disutility associated with severe ED is comparable or even greater than disutility associated with many chronic morbidities.

**PIH61****REFERENCE EQ-5D-3L AND EQ-5D-5L DATA FROM THE ITALIAN GENERAL POPULATION**

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